

16568

TITLE OF THE INVENTION

4"-KETO-AND 4"-AMINO-4"-DEOXY AVERMECTIN
COMPOUNDS AND SUBSTITUTED AMINO DERIVATIVES THEREOF

5 ABSTRACT OF THE DISCLOSURE

There are disclosed novel avermectin
41 compounds wherein the 4" hydroxy group is oxidized to
a keto group or replaced with an amino or substituted
amino group. The keto compounds are prepared by
10 oxidation with reagents such as oxalyl chloride in
dimethylsulfoxide. The amino compounds are prepared
from the ketone using a reducing agent and an
aminating agent. Substituted amino compounds are
prepared from the thus produced unsubstituted amino
15 compounds. The keto compounds and amino compounds
have utility as anti-parasitic agents and
compositions for that use are also disclosed. The
compounds are also highly potent insecticides against
agricultural pests. In addition the amino compounds
20 have anti-bacterial activity which is not found in
any of the precursors.